Frankly Speaking

Achievement

MATTERS of traffic operations have been given a foremost position in highway transportation of the present, and in plans for after the war. Out of the past have come achievements. The need for basic factors of vehicle and driver characteristics in highway design and traffic planning, as well as in traffic control and regulation, has been shown and accepted by those engaged in matters of motor vehicle transportation. Traffic Engineering has gained a place of prominence in this field, and promises to continue to contribute safety and facilitation in traffic planning and operations.

While there have been mistakes in our profession in the past, and while there will be others in the future—if we do anything—much has been gained. Whether it is said that time mellows all, that experience is life's best teacher, or that good always prevails, the field of traffic operations seems to have gained a prominent place which can be held and elevated with sound study and hard work. Nothing better can be said for any professional group.

If fault is to be found, it is that individual gains and hopes frequently prompt actions that are not inducive to advancement of the profession. Maybe we would do well, for our individual and collective good, to keep the aims and needs of the profession constantly in mind.

There will be occasions when creative urges and imagination will tempt departures from conservative, practical programs of endeavor. As individuals and a profession we should keep our feet on the ground by dealing with practical and tangible situations.

Secretary-Treasurer.

VOLUME XIV DECEMBER, 1943 NUMBER 3

Role of Transit in Post-War Planning

A "CONVENTION-IN-PRINT" was held by the transit industry this year marking the 62nd Annual Convention of the ATA.

The theme—"The Role of Transit in Post-war Planning"—is set forth in four sessions, included in Volume I of Passenger Transport, Numbers 22, 23, 24 and 25.

The General Consensus of Opinion

Prominent experts, participating in this unique convention, agreed that complex city planning problems face transportation experts dealing with traffic problems if the maximum of benefits are to be derived from our street transportation systems by the public at large.

Instability of population and property values, waste in public improvements, and blight and decay confront the urban traffic planner. Only by careful and cooperative study, with city planners, of the forces underlying the changes which create the present conditions, can the traffic planner hope to formulate comprehensive traffic and transit plans providing the maximum of transportation service safely and expeditiously, and at the same time promote public convenience, prosperity and general welfare through sound and orderly development of our urban environments in which millions of Americans will have to live and earn their livelihood.

Excerpts of the remarks of those experts in fields most closely related to the future normal responsibilities of the traffic administrator are recorded in the following pages, starting with the first "session":

Transit Is Meeting the Challenge

Mr. Joseph B. Eastman, Director, O.D.T., considers it a worthwhile step toward post-war transit planning to consider what of wartime changes in transit, such as bus routings, multiple use of buses for special service to plants on staggered shifts, suspension of unnecessary stops, elimination of uneconomical service to outlying areas, duplication of service by bus and trolley, etc., can be retained after the war's end with benefits to the community in decreased running time, more frequent service and with less overhead and cost in operating the public transportation facilities.

Mr. Eastman urges that thought be given to modernizing equipment and to choosing the type and size of vehicle, and to setting the rate of fare.

He ends by stating that public transportation is as essential to community life as water and electricity and this will be just as true after the war as it is today.

Transit an Essential Part of Community Planning

Mr. Powell C. Groner, President of the ATA, after pointing to the fact of close-in blighted areas and expansion of residential and business districts beyond the corporate limits of central cities, remarked that this rapidly growing major problem was only halted by the war.

Mr. Groner suggests that the war transportation committees and administrators now set up can well serve as a nucleus of experienced and disinterested men qualified to see that Transit's place in the picture receives adequate attention as a matter of public interest.

The problems of local transport, arising from the war, will not be solved by the ending of the war but will be equally acute in the adjustment period thereafter.

Modern Transit—Key to Community Planning

Mr. Harland Bartholomew, Director of St. Louis Regional Planning Association, considers our present cities as forming a surprisingly uniform picture, with the values of the congested and crowded central business districts lower than they were twenty years ago. He predicts that another decade of decentralized growth will bring economic paralysis to many of our large cities.

The use of the automobile permits people to expand the potential urban area of a city one-thousand percent and we can never build our cities over the large area made available by the automobile even though during the next twenty-five years the average city can expect a population growth of only twenty or thirty per cent. To try to meet the decentralizing demands of the automobile will require the provision of urban services such as police and fire protection, sewers and water and the like beyond our resources without bringing ultimate advantage to anyone.

The first step is for each city to make certain that it has a complete, up-to-date, comprehensive city plan embracing its entire metropolitan area. The plan should rest upon three basic considerations, namely: total population to be served, the manner of population distribution, and the pattern of urban land use. Such plans should anticipate a twenty-five year period of growth. Each plan, once prepared, should be kept up-to-date by revision and periodic review made necessary by changing conditions.

There must be a large and militant citizen organization that is fully informed regarding the plan and willing and able to come to its defense at all times.

There can be no end to decentralization until the older urban areas are rebuilt and made attractive places in which to live and raise children. There can be no stability for the entire urban area so long as the older areas exist in their present condition. A modern transportation plan should be prepared as a part of the comprehensive city plan. A transit system developed in accordance with such a plan can be one of the most effective means of achieving a stable and sound urban development.

If we have attained sufficient maturity of judgment in our community building we will understand the superior need for putting our house in order, for rebuilding obsolete slum areas, for rehabilitating blighted districts, for realistic revision of zoning ordinances, for relieving traffic congestion problems at their source, and for similar planning measures. Of highest importance in such a program —a master key to the building of a sound, stable, well balanced city—is a modern, well designed transit system as a part of the comprehensive plan.

The Goals of Community Planning

Mr. Walter H. Blucher, Director of the American Society of Planning Officials, summed up the plight of our cities as being caused by:

1. Inadequate and improperly located housing.
2. Transportation arteries and facilities ill-adapted to the city's needs.

Both subjects are so closely related that they can be discussed only together.

Today we find many of our people living in areas that are blighted or slum, usually close to the center of

the city. To get to their work they must drive a private automobile, use a bus, a street car, or some other form of transportation. If they travel in a street car or bus, the possibility is that they may travel in equipment which should have been scrapped many years ago, and is operated over indirect or circuitous routes.

Of those employed in the central area, who sought to escape from the dirt, noise, and disorder of the city, few have achieved the quiet, the space and the privacy sought.

The city, after the war, must provide for the restoration of the neighborhood within the city. Such a neighborhood must be protected from encroachment of undesirable uses and maintained as a location where for all time to come—within reason—the homes are to be comfortable and well arranged, where there is sufficient light, air, open space and garden space to simulate the suburban neighborhood.

Public transportation in the city of the post-war era will become even more important than it has been in the past. The need for extension of transit lines through large vacant areas to reach outlying populated territories will be substantially reduced and stability of city development will be encouraged.

Imagination and courage, coupled with intelligent planning, equal stability and orderly development.

Housing and Transportation

Mr. Jacob Crane, Director of Urban Studies, National Housing Agency, points out that there is no evidence of a reversal or halting of some of the trends of urban development clearly describable before the war.

From the standpoint of the transit industry, no less than that from the general community economy, the progressively creeping blight of the territories of our larger cities has a sinister importance.

Public transportation is intimately related to the rehousing and redevelopment of our central cities.

The value of a local housing program will be definitely proportional to its integration with the comprehensive city development plan for all elements of the community structure.

One of the measures within a local housing program for controlling city blight is the neighborhood and redevelopment law for combined public and private action for rebuilding blighted areas.

Another element is the densities of the redeveloped areas. This can be decided only after the study of a number of city planning factors.

Blight, per se, cannot be eliminated by merely tearing down existing housing and replacing it with new buildings, and there is little hope that individuals working alone can arrest the progress of blight through the improvement of their individual properties.

Bills are now pending in the Federal Congress whereby the Federal Government will be able to assist local communities, both financially and technically, in the redevelopment of slum areas.

Unless transit needs are planned into new subdivisions and redeveloped areas, insufficient and uneconomical service will result with buses passing over streets not planned for such traffic injuring the development.

Housing and planning agencies and public transportation companies must seek each other's advice and cooperation to obtain the best individual and community results.

The Architect's Concept of Post-War City Needs

Mr. Ralph Walker, member of the firm of Voorhees, Walker, Foley and Smith, New York, recalls to our attention that in the very first stage of the growing change in the city pattern, the idea of a controlled and pur-

poseful decentralization in the form of satellite towns was proposed.

Mr. Walker sees that effect of science upon the central city in such force that the majority of any great city's inhabitants could live a lively life and a much more normal one in a satellite community.

Mr. Walker concludes that any attempts to bring back to, or even stabilize population in urban centers, without understanding and offering the amenities found in the suburbs, will meet with opposition. He predicts there will be a gradual growth in regulations restricting building heights, and use will be regulated to develop more equal opportunities and to obtain more equitable income possibilities from stable population, and, as a result, the city's financial structure will achieve a sounder basis.

The pattern resulting from controlled central city and suburban development will be made up of independent satellite cities and towns surrounding a central urban unit. The daily tidal waves of workers into and out of the central unit will decline and more short-haul travel will be experienced within the existing satellite towns.

Mr. Walker sees a new conception of land ownership which suggests a limited tendency rather than the old concept of life ownership and family investment. Future building will rest more on community income levels than on congestion of population.

The indeterminate zoning of industry and the lack of canalization of automobile and truck traffic has caused a higher mortality in neighborhoods than has the obsolescence of buildings. The canalization of through motor traffic is an absolute necessity if community life is to be preserved.

The unplanned use of downtown land for parking lots is helping to depreciate further the surrounding properties.

The modernization of homes in well preserved neighborhoods is absolutely necessary if decent housing is to be supplied to everyone.

Steps Required to Revitalize Cities

Mr. Charles T. Stewart, Director of the Urban Land Institute, asserted that the outward redistribution of population in urban areas has ushered in an unequal competition between the environment of the long established city areas and the new districts developed in outlying areas.

As long as the more desirable commodity remains exclusively a suburban offering, we can expect a continuation of the trend. In recent years the low cost attraction of the outlying areas has been diminishing. The suburbs are largely residential dormitories. They do not contain all of the business property that serves the immediate local population or the office buildings and factories in which their citizens work. They do not have the tax producing property to justify full-fledged standards of public service. Suburbs that did not need high type streets, sanitary sewer systems, or water systems in their early development, have become more densely populated and must now provide these services through heavy property assessments. One of the Federal planning agencies reported that "during the period of financial stringency the municipalities which were in greatest need of loans and aids were the satellite towns surrounding the central metropolitan cities".

The attractions that lure the public from established city areas are brought about by carefully developed, amply tested, and deliberately applied land development practices which could be duplicated in the redevelopment of city areas quite as readily as they can be employed in the original development of a remote suburb.

Modern city planning principles favor molding old street layouts into

vastly different patterns, designing lot shapes and sizes with slight resemblance to the typical city lot and establishing standards of population density and land coverage, quite different to conditions now prevailing in badly or inadequately planned areas. When tried, these new planning standards have proved capable of protecting values and restoring wasted city areas to productivity.

The principal barrier to replacement and restoration is the excessive value placed upon land in the blighted areas.

The only hope for rebuilding in accordance with modern standards of neighborhood livability lies in the perfection of a process that can equitably devalue the land in eroded urban areas to a point that will justify low density development.

Expanded eminent domain laws exist in eight States.

Ample sources of private credit are available to finance soundly planned neighborhood construction.

The major part of the postwar housing demand can be expected in the modestly priced brackets. If the demand cannot be supplied in accessible city areas, it can and will be supplied in remote areas.

The Neighborhood Development Bill introduced in the U. S. Senate by Senator Robert F. Wagner, of New York, would provide for an extension of Federal credit to municipalities and through the use of the long term loan and a low rate of interest absorb the discrepancy between prevailing land cost and the re-established value that would be placed upon land to induce the proper type of development. This bill is based on the premise that cities are desirable, economically supportable, can be well-organized and can offer the most widespread accessibility of cultural benefits, but need not be congested cities.

Cities need new street planning that will recognize that there are different kinds of streets for different purposes.

Public transportation has economy and efficiency on its side, but lacks adequate comfort and convenience.

To arrive at something better in the postwar period than a building boom, basic procedures must be coordinated by bold planning. Pending legislation for opening up the field for redevelopment to private enterprise must be supplemented by foreclosure of tax delinquent property, demolition of unsafe and unsanitary structures, improved condemnation procedure, improved building regulations, more effective zoning, more equitable tax treatment and comprehensive city planning.

Having developed the idea that transit is an essential part of community planning through the testimony of the experts who participated in the first "session," the second "session" was given over to the elements necessary to the actual making of a transit plan. Guy A. Richardson, Director, Division of Local Transport, ODT, started off with a historical resume of the activities of his division, and then developed the actual organization picture of the agency as it affects local transit operations everywhere.

Clear Away the Obstacles to Transit Improvement

Edward Dana, president and general manager of the Boston Elevated Railway Company picked up a theme which he first developed in 1936 and fitted it to current needs by suggesting that our experience with labor-management committees might point the way toward clearing up the welter of red tape and governmental regulation with which the transit industry is beset.

Since the public suffers most, Mr. Dana argued for better public rela-

tions as being part of the industry's responsibility to the community—a necessary part of the drive to bring about teamwork between public authorities, labor and management. In closing, Dana said, "Public transit played a large part in building the modern American city. Strike off its shackles and public transit can again become a most important factor in saving these cities from the disintegration that threatens them."

A Transit Plan for Cleveland

W. J. McCarter, general manager of the Cleveland Transit System unveiled his new, long-range program to revamp the entire city system. The plan calls for estimated time savings on shorter routes amounting to 9 or 10 minutes; as much as 25 minutes on some of the longer routes.

The most radical change called for in the Cleveland plan is for a midtown subway loop utilizing existing private rights of way. Construction will require an expenditure of about $13,000,000 for the downtown facilities and about $22,000,000 on the outlying rights of way which are to bring the high speed through cars into the business district.

Future of Transit and Community Closely Linked

A symposium covering the views of sixteen management executives in which consideration was given to shifts in population due to the closing of war plants, the use to which government housing projects will be put once the war is over, the continuing trend toward the decentralization of business and amusement districts, and of course the ever present question of the extent of transit riding, once the private automobile starts coming back into its own.

Consensus was again that the transit industry must take a more active and vocal part in community planning if it is to do the job it is really geared for doing.

How Much Auto Competition?

A forum of Pros and Cons by ten transit executives, in which the idea was developed that it will take the automotive industry some time — two to three years — to get back into full production and distribution. That there will not be a market in this country for the small, cheap car, and that the transit industry has an educational opportunity *now* to sell the idea of the transit ride for certain kinds of urban transportation — shopping, business, school etc.

Modernized Equipment and Routing— A Post-War Must

Suggestions and comments by thirteen operating executives. The whole set up of equipment and routing must be revised — and that quickly — once the war is over. Only in that manner, can the industry hope to save its face and sell itself anew to the traveling public. The lag in auto production should offer the needed time, and the war operation of the industry has given us the experience and the "know how."

What Policies When Peace Comes?

Discussion by 12 transitmen. The industry must not lose sight of the benefits and lessons learned in wartime operation. Must look to and expect more cooperation from the public and the community than was had in prewar days. Also, some kind of control will have to be accorded the national transit industry during the transition period so that a standard of service may evolve which is satisfactory to the public everywhere. Advertising and public relations must step up.

Financing Post-War Plans

Digest of the views of 6 executives. Cash reserves must be set up now, when revenues are high, to provide funds for improvement in equipment

and rights of way, as well as to take care of the deferred maintenance schedules which are hanging over all companies. The needs of the industry will be very great; the dollar reserves must therefore be in proportion.

While the third "session" of the convention-in-print dealt with the outlook for postwar equipment and maintenance, it was featured by a business session, in which the new officers for the year 1943-44 were elected, and the Treasurer's report filed. E. D. Merrill, president of the Capital Transit Company, was elevated to the ATA presidency and Colonel Roane Waring, president and general counsel of the Memphis Street Railway Company, elected vice president.

Transit Industry Can Profit From Wartime Equipment Experience

E. S. Pardoe, chief, Bus and Electric Railway Section, Transportation Division War Production Board, opened the discussion of equipment by reviewing the lessons learned during these trying times; lessons having to do with the pooling of equipment, ideas and services; lessons derived from long hauls and slack maintenance.

The session was then thrown open to the manufacturing members who gave their views on postwar design.

Trend and Timing of Bus Improvements

Frank Geisler, vice president of Transit Buses, Inc. argued that postwar bus advancements will come through a process of natural evolution. F. R. and W. B. Fageol, respectively president and vice president of Twin Coach Company, collaborated to discuss the improvements which they expect in the new pilot models. L. H. Corlette, coordinator of postwar planning for the J. G. Brill Company states his case by saying that passenger comfort and low maintenance costs will dictate the postwar designs, while R. A. Hauer, vice president of Mack International Motor Truck Corporation insists that bus performance must be good enough in the postwar era to overcome high wage rates which will still be with us. Ira S. Snead, vice president of White Motor Company contends that the passenger deserves better transportation and figures that the new materials and methods developed during the war will give it to him. I. B. Babcock, president and general manager of General Motors Truck and Coach Division feels that the new ideas will have to be thoroughly tested, and that therefore development time will be a factor before new models are available.

Electrical Developments Aid Passenger Transport

E. E. Kearns of the Transportation Department of General Electric Company discusses the new electrical apparatus available for transit service and makes the point that many of the more important developments will be ready for production immediately while A. J. Manson, manager, Light Traction Section Westinghouse Electric and Manufacturing Company states the case for the increased importance of electrical transportation.

The Trolley Coach—A Public Vehicle Of Increasing Usefulness

Alonz R. Williams, first vice president and general manager of the United Electric Railways Company says that the trolley coach is the best available vehicle for all-purpose local transit and C. H. Dahl, manager of transportation Winnipeg Electric Company bases his support of the trolley coach on the fact that figures tell the story and then proceeds to pin it down by quoting operating results per mile. L. W. Birch, engineer, transportation department, Ohio Brass Company, then takes up the manufacturer's angle again by telling of current improvements in trolley coach overhead.

The PCC Car—1945 Model

A. H. Leschke, chairman, ATEA Advisory Committee, makes a full report of his committee's work in recommending improvements in the PCC car and in standardizing maintenance practice as well. He makes a good case for the most modern piece of equipment now available to the industry and forecasts a 1945 model that will keep the car in the lead.

Prospects for Post-War Track Design

John B. Tinnon, vice president of Metal and Thermit Corporation tells of the advancements to be expected in track design for the future and points to the lessons learned during the trying period of war maintenance.

The convention-in-print closed with a fourth "session" featured by a lead editorial over the signature of Charles Gordon, managing director of the ATA, entitled "After Victory—Opportunity!"

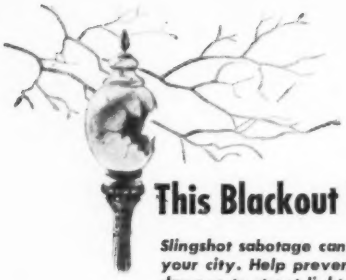
Under the title, "Ask the Rider!" Henderson Gilbert, President, Harrisburg Railways Company, leads off by discussing what buses need most—and first. It is pointed out that maintenance and operating considerations have had too much weight in the matter of bus design. The author says that the transit industry is facing a competitive situation where the public should be heard, in fact, must be heard.

As a corollary to this leading article, J. C. Baine, Jr. of the New Orleans Public Service Company submits "An Interview With Joe Doakes." This imaginary character humorously referred to as the forgotten man of 1943, sets forth what is needed to make the bus a satisfactory vehicle. Other articles dealing with the post-war bus, follow. The idea is expressed that once the war is over, there will be a quick and ready market for new buses, but the new designs will not emerge over night. The tendency will be to build more or less standard types until the pressure is off, then manufacturers will be encouraged to build equipment that is outstanding in passenger appeal, to meet the renewed competition offered by improved types of private conveyances. One convention participant, W. R. Pollard, Manager of Transportation, Georgia Power Company, says that the time is ripe for standardization of bus design, following the example of the PCC car.

Under the heading "Electrical Developments Aid Passenger Transport" a number of authorities discuss experiences with short-wave radio facilities for handling emergencies. As an example of the advantages of this type of facility, S. D. Forsythe, of the Chicago Surface Lines stated "It has been possible through the use of radio to reduce by 45% the number of man hours spent in either answering or waiting for Electrical Department trouble calls."

Many other papers are included in this fourth "session," including discussion of unit type rectifiers for power conversion, carbon insert shoes, new brakes for the PCC car, permanent benefit of upgraded men and other subjects of current interest.

Seasons Greetings



This Blackout Will Help the Enemy

Slingshot sabotage can seriously impede the war effort in your city. Help prevent the hazards and waste caused by damage to street lights.

THE Government has recognized the wartime importance of traffic safety lighting by granting high priorities and by allotting sufficient materials to maintain every lighting system efficiently.

But efficient lighting and the prevention of waste can be obtained only with your cooperation. The man-power shortage and the limited material supply impose upon everyone the responsibility of alert conservation. We manufacturers are substituting less vital materials whenever feasible. The utilities are keeping their stocks down to the practical minimum. Everything possible must be done to preserve adequate lighting for the duration.

Here's What You Can Do to Stop Destruction of Lighting Equipment—A 5-Point Program

1. Conduct educational campaigns in the schools and through newspapers to combat thoughtless and malicious destruction.

2. Urge the public to report conditions which may cause service interruptions. These can then be corrected on regular service calls, saving the expense of emergency calls.

3. Request citizens to report damaged street lights promptly, in order to have service restored as quickly as possible. When any parts of the lighting equipment, such as canopies or sockets, are found on the ground, they should be picked up and returned to the utility.

4. Instruct the police department to give all possible protection to the lighting equipment.

5. Publicize any arrests or convictions for the breaking of street lights. Point out the grave results which may occur. Public safety demands the proper maintenance of street-lighting systems.

The engineering services of the General Electric Illuminating Laboratory are available to assist you with your traffic safety lighting problems. General Electric Company, Schenectady, N. Y.

GENERAL ELECTRIC

454-22D-3010

When writing advertisers, please mention TRAFFIC ENGINEERING

War Worker Automobiles

by H. S. FAIRBANK

AT LEAST 60 per cent of all automobiles registered in 1943 are owned by workers in industries essential to the Nation's war effort. Between 60 and 80 per cent of the automobiles registered by these workers are light-weight vehicles weighing not more than 3,000 pounds, while the average age of these vehicles is somewhere between 6 and 8½ years.

These are some of the more important conclusions reached by Public Roads Administration officials following their analysis of preliminary data obtained in a cooperative study of current automobile registrations in which state motor-vehicle-registration authorities, state highway-planning-survey organizations, and the Highway Traffic Advisory Committee to the War Department are participating.

The Public Roads Administration instituted this project at the request of certain federal agencies responsible for providing and distributing supplies of automotive equipment, tires, parts, and fuel for essential civilian needs. Officials of these agencies were becoming concerned over the possibility that the inability of workers to obtain replacement parts for the vehicles they now use in getting to and from their work would eventually result in a serious decline in the production of goods and the maintenance of services essential to the war effort. There was concern also about the possibility that the older cars were concentrated in the hands of workers in the more essential industries. It was hoped that such a study would yield information that would be of assistance in the development of programs to assure the maintenance of necessary private automobile transportation facilities.

In a preliminary report on the findings of these studies released October 31, 1943, the Public Roads Administration furnishes information for 13 states and the District of Columbia. Although no claim is made that the data presented can be regarded as being truly representative of the nation as a whole, there is evidence to indicate that considerable reliance can be placed upon them. While the conclusions already referred to are probably the most significant in the light of the present emergency, several others may be drawn from these data that would perhaps be of even greater interest in more normal times.

Light-Weight Vehicles

For example, the data indicate that although light-weight vehicles (weighing 3,000 pounds or less) comprise nearly 70 per cent of all vehicles registered, the percentage relationship of these vehicles to total vehicles is much higher among the older vehicles than among the newer ones. On the other hand, the percentage relationships of both medium-weight vehicles (weighing more than 3,000 pounds but not over 3,500 pounds) and heavy-weight vehicles (weighing more than 3,500 pounds) to total vehicles are considerably lower among the older vehicles than among the newer ones. The average age of the light-weight vehicles registered appears to be about 1 year higher than that of all vehicles registered, and about 3 years higher than the average ages of both the medium-weight and heavy-weight groups.

The data indicate also that the ownership of light-weight vehicles is con-

centrated largely among farmers, factory workers, laborers, and personal-service workers, while the ownership of heavy-weight vehicles is concentrated primarily among proprietors and managers, persons engaged in professional work, and traveling salesmen and agents. The ownership of medium-weight vehicles appears to be distributed quite evenly among the various segments of the population although some of the characteristics of the distribution of heavy-weight vehicles are discernible.

Age of Automobiles

From the findings of this study it appears that over half of the automobiles now in use are 6 or more years old, while more than 20 per cent of them are 10 or more years old. The average age of the 382,313 vehicles for which the year model was reported was computed to be 6.4 years.

Comparison of the average-age data obtained in this study with information available from the 1940 Census indicated to Public Roads researchers that there is a relatively close direct correlation between the average ages of the passenger cars owned in the areas reported upon and the per cent of the population residing therein in 1940 that was classified in the Census as "rural farm." In other words, the average ages of the vehicles owned tend to be highest in the rural areas.

It is expected that when the present study is completed it will include information for at least 28 states and the District of Columbia. It is hoped that all the information sought will be received in Washington in time to permit publication of the final report on the project not later than March 1, 1944. A study of 1944 registrations along the lines of the 1943 project is contemplated.

A summary of P.R.A. Report No. 2 on Automobile Registration Characteristics by H. S. Fairbank, Deputy Commissioner, Public Roads Administration, Washington, D. C.

ALL AGREE ON AN AUGMENTED PLANNING PROGRAM

City planning, which includes the coordination of plans for major expenditures for streets and highways, water supply and sewers, park and recreation facilities, public buildings, rehabilitation of depreciated and obsolete areas in accordance with a master plan and a capital improvement budget prepared by a city plan commission, was accepted by mayoralty candidates in Philadelphia, Cincinnati and Detroit. Mayor Samuels of Philadelphia, — where by the way a recent financial survey showed that any future public works program will have to be financed by services other than general bonds or revenue from real estate taxes—stated that he had included in this budget recommendation for 1944 $150,000 for a City planning staff.

(from A. S. P. O. News Bulletin)

ONE MILLION DOLLARS FOR—

financing street improvements, new traffic control equipment, additional traffic officers and an extensive traffic safety program has been collected from parking meters in Portland, Oregon in the last five years and invested in the above improvements which, according to Commissioner William A. Bowes, brought savings to the extent of at least 26 lives.

The saving of these 26 lives alone amounts to a quarter million dollars, without considering the savings from personal injury and property damage accidents, and the equally great returns from reduction in congestion. A considerable portion of parking meter revenue is now being earmarked for traffic improvements after the war.

(from U. S. Municipal News)

California Experience with Portable Traffic Counters

The California Division of Highways has been conducting experiments with portable automatic recorders of two different makes, both of which are operated by electric current from dry cell batteries, the counting mechanism being actuated by air impulses set up by the impact of the tires of vehicles crossing a rubber tube stretched across the roadway and connected with the instruments.

A series of tests were made and the results tabulated, the portable recorder count being checked by a manual count.

The Make A counter seldom fails to count every axle crossing the road tube. The Make B counters, on the other hand, tend to miss axles occasionally, particularly the second axle of vehicles with dual rear axles.

If traffic were measured in terms of axles passing a given point, the Make A counters would be definitely preferable as they count axles more accurately. However, with traffic counted in terms of vehicles it was believed the Make B counter produces slightly more accurate results and with possibly greater consistency, since it appeared to be less sensitive to slight changes in adjustment.

The plan followed was for the field man to set out the counters at points previously determined on the road maps. Each count was for a 24-hour period. This permitted the field men to place the instruments and take initial readings at such times as were convenient during normal working hours and arrange to take final readings and pick up instruments in the same sequence 24 hours later. Since the instruments were generally spread over a distance not exceeding 20 miles for a specific area the slight time offset between successive counters did not introduce any material error in results and also largely eliminated overtime for the field men.

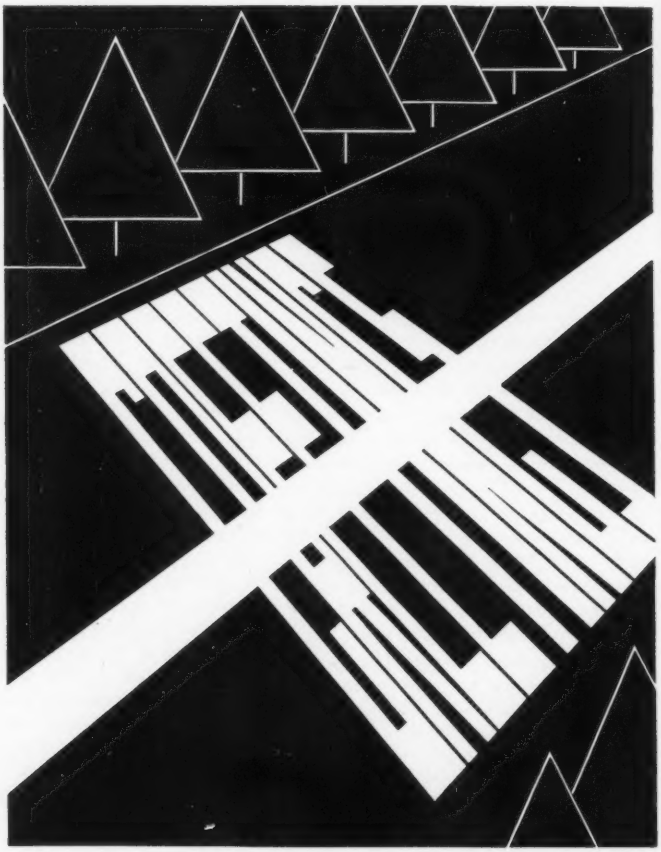
The principal disadvantage of automatic counting is the lack of any segregation of the traffic into various classifications such as trucks, buses, cars, etc. This was overcome to some extent by having the field men make four-hour manual classification counts at representative automatic counter stations in spare time available after setting out the counters.

A total of 56 such manual counts were obtained during the course of the automatic counting program. On the basis of data so obtained it was possible to compute the distribution of the various types of vehicles in terms of percentage of total traffic at the specific locations where manual counts were made. By combining the results of all such counts in a county or other geographic area, average distribution factors were obtained by means of which calculations of vehicle type distributions at other counter locations could be obtained with a fair degree of accuracy.

"California Highways and Public Works"—September-October, 1943—R. E. Pierce, Principal Highway Engineer.

Happy New Year

PRISMO "LIFELINE"



· · FOR FORTY·FOUR

THE PRISMO SAFETY CORPORATION

HUNTINGDON · · · · · · · PENNSYLVANIA

When writing advertisers, please mention TRAFFIC ENGINEERING

ITE NEWS AND PERSONALS

Who's Who Among I. T. E. Members

Starting with this issue, a story will be included from time to time dealing with the life and activities of some outstanding member of the Institute of Traffic Engineers. In the absense of any published book of "Who's Who in Traffic Engineering," this column may serve instead to better acquaint readers with men who have done outstanding work in the field of Traffic Engineering.

WILLIAM PHELPS ENO, our first honorary member, is recognized as one of the great pioneers of traffic engineering, having been active in this work both in this country and abroad since 1899. He was born in New York City on June 3, 1858.

He secured his B.A. degree from Yale University in 1882. From this time, until 1899, he was engaged principally in real estate, though during this period he maintained an active interest in traffic control, writing articles and talking before various groups.

In 1902, largely as a result of Mr. Eno's efforts, a major step in traffic control was taken in New York City, when the English block system was adopted and three mounted policemen assigned to traffic duty.

Traffic Codes

On October 30, 1903, New York officially adopted its first traffic code, devised by Mr. Eno, which has served as a model for subsequent codes throughout the world. Allied Force Headquarters in the North African Theater of Operations has adopted Mr. Eno's "Road Traffic Control Code, With Safety Rules for Pedestrians", and has requested that it be adopted by the French Army and the civil authorities of Morocco, Algeria and Tunisia. Practically the same code was adopted by the French at the front in 1917-1919, which both the American and British troops followed. It is curious that the code furnished the French in 1912 had to be observed by the British and American troops over there in 1917-1918, and now, a quarter of a century afterwards, the same code, revised, is recommended to the French by the Americans.

Traffic and Transportation Work

In 1905, a rotary traffic plan, designed and recommended by Mr. Eno, was adopted at Columbus Circle in New York. In 1907, it was adopted around the Arc de Triomphe in Paris, followed by many places throughout the world, including the Rond Point on the Champs Elysees in 1927. It is now urged by Mr. Eno for Columbus Circle in its revised form. Because of his work, as director of the Home Defense League for the District of Columbia in 1917, he was unanimously elected Chairman of the Division of Transportation of the Committee on the Comfort and Welfare of War Workers, by fourteen national organizations, the object of which was to expedite transportation of war workers to and from their jobs. This was followed by the transportation of influenza victims, during the epidemic, from wherever they were to temporary hospitals.

In December, 1918, Mr. Eno was appointed by the United States Council of National Defense as Chairman of the Highways Transport Committee.

Besides writing eight books and many other pamphlets and articles on traffic control, Mr. Eno has acted in an advisory capacity to authorities in the United States, France, England, Japan, Germany, Belgium and Italy. Mr. Eno, a Yale graduate, has also received the degree of M.A. for his work on traffic and has been decorated twice by the French Government.

Eno Foundation

In 1921, he incorporated the Eno Foundation for Highway Traffic Control under the laws of the State of Connecticut, and endowed it, establishing a permanent center for traffic study. The Foundation's central building and Mr. Eno's home are located at Saugatuck, Connecticut. The Foundation was affiliated with Yale University in 1933 where Mr. Eno has lately established the Eno Foundation-Yale Fund, part of which has been used to enable the Institute of Traffic Engineers to make an investigation of War Worker Transportation and part on a New England Regional Study by Yale University for post-war regional planning.

This Spring will be the forty-fourth anniversary of his work on traffic control for the purpose of saving life, time and money.

I.T.E. Proceedings

Proceedings of the 14th Annual Meeting held in Chicago, from October 3-5 are now in the hands of the printers according to Editor Bill Powell. There is a good chance that it will be on the desks of the members by New Year's. Never before in the history of the Institute has the proceedings been completed with such speed. The interest in this new proceedings is expected to run high in view of its timely papers on current war transportation problems and post-war traffic planning.

Looking For A New Job?

From time to time, requests are addressed to the Institute of Traffic Engineers for names of persons who might fill job openings in the field of traffic engineering. It is suggested that anyone interested in being notified of future job openings send their name, address, age, title, desired salary, and any other pertinent data to Institute headquarters. Naturally this information will be kept confidential in the Institute file and will be supplied only to employers seeking to hire new men.

Post-War Planning

Grant Mickle (Member) recently appointed as Chairman of the Institute's Committee on Post-War Traffic Planning was selected to head the programming sub-committee of the National Safety Council's Committee on Post-War Traffic Safety Planning. This sub-committee met in Chicago on November 29th and 30th and developed a working program for the Planning Committee.

The Committee on Post-War Traffic Safety Planning was appointed by W. Graham Cole (Member) General Chairman of the Street and Highway Traffic Section of the Council. Mr. Kenneth W. Colman, President of the Seattle Safety Council, is serving as Chairman of this important planning group. In addition, Mr. C. J. Rutland, Chairman, Dallas, Texas, Citizens Traffic Commission, is Vice Chairman for Education; Mr. Tom J. Seburn (Member) Traffic Engineer, Kansas City, is Vice Chairman for Engineering; and Mr. Edward J. Hicky, Commissioner, State Police of Connecticut, is Vice Chairman for Enforcement. Russell E. Harrison, (Associate) Traffic Engineer of the National Safety Council, is serving as Secretary of the Committee.

Letters From The Members

Ideas and suggestions from the membership will be gratefully accepted for publication in this section. Send your letters to News Editor, Henry K. Evans, Institute of Traffic Engineers, 60 John Street, New York 7, N. Y. In the November issue of Traffic Engineering, President Hammond asked for your suggestions on "How Can the ITE Be of More Service to the Members?"

In response to the plea for contributions, M. O. Eldridge (Mem.), Assistant Director of Vehicles and Traffic, District of Columbia, Washington, D. C., writes the following: (Due to space limitations it is not possible to include the entire letter.)

Letter

"Some of the members might be interested in those problems which have been engaging the attention of myself and several other members including Mr. Van Duzer, Director of Traffic and Director of Defense Transportation for the District of Columbia, and John Ecker of the Capitol Transit Company and also to a lesser extent Guy Kelsey of the Office of Defense Transportation, Burton Marsh of the American Automobile Association and Major Paul Ristroph, who is with the Corps of Engineers.

"While many cities and states have reported traffic decreases of 60% and more, traffic volume in Washington has remained at about 70% of the 1941 traffic and 1941 was the all time peak of Washington's traffic, because of the terrific expansion of the Government offices which occurred during the years just prior to Pearl Harbor and the fact that we had at that time no rationing of gas, tires or cars.

"As a result of these conditions, we have had the usual request to turn out signals. Our force is far too small to make the necessary traffic checks for intelligent changes in the signals, on such a large scale. To overcome this, we have twice called upon the Boy Scouts, who have been extremely cooperative, in spite of numerous other calls upon their time.

"To conserve the taxis and permit them to do a better job, a "group riding" system was instituted under which cabs, after picking up one passenger, placed a sign on the windshield indicating the general section for which that passenger was bound. They would pick up any other persons along their route, bound in the same general

PASSENGER TRANSPORT

- By now, if you have been receiving Passenger Transport only occasionally, you probably have come to the realization of PT's importance to you and your industry.

- This is to assure you that you may receive PT regularly every Monday morning, as a *paid subscriber*, if you will send in your order NOW. The coupon below is for your convenience.

American Transit Association
292 Madison Avenue
New York City

Please enter my (individual) / our (corporate) annual subscription / subscriptions to *PASSENGER TRANSPORT* starting with the first available issue. Enclosed find my / our check (U.S. funds) payable to American Transit Association, in the sum of $.....

RATES

Individual ..... 1 year $3.50

Corporate, one year:
up to 3 copies...$3.50 each
4 to 6 copies.... 3.00 each
7 to 10 copies...$2.50 each
over 10 copies... 2.00 each

Signed .....

Company .....

Street Address .....

City & State .....

direction, a reduced fare being charged under such circumstances.

"A further problem was the agitation to discontinue safety inspections for the duration. However, since it is probable that persons will continue to drive cars which are unsafe, and difficult to get repaired because of shortages of repair parts and mechanics, this did not seem desirable, especially since all vehicles are within about three miles of an inspection station. To reduce inspections to a minimum, we have prevailed on the Office of Price Administration to make some adjustment of their time inspection requirements, so that one of those inspections each year could be made by our inspectors at the same time as our annual safety inspection. This required considerable study, to work out an integrated schedule for the various types of ration holders. Some modification of our own inspection requirements was also made, so that cars needing minor adjustments could be granted an 'approved sticker' upon promise to have the deficiency corrected. They are then given a post-card upon which the garage making the adjustment indicates that fact and returns it to us."

Good work! Let's have some more letters like this from the membership.

Personals

F. M. "NICK" CARTER (Mem.), Assistant Traffic Engineer, California Division of Highways, has been elected President of Sacramento Chapter II, California State Employees' Association.

CAPT. JAMES E. P. DARRELL (Assoc.), Assistant Traffic Engineer of the Minnesota Division of Highways, who has been working under the Sixth Service Command in Chicago, has been transferred to Detroit, Michigan, where he will be closely associated with Lieut. Col. Arnold Vey (Mem.). Darrell is with the Army Transportation Corps and has been appointed Highway Transportation Officer for the Detroit district.

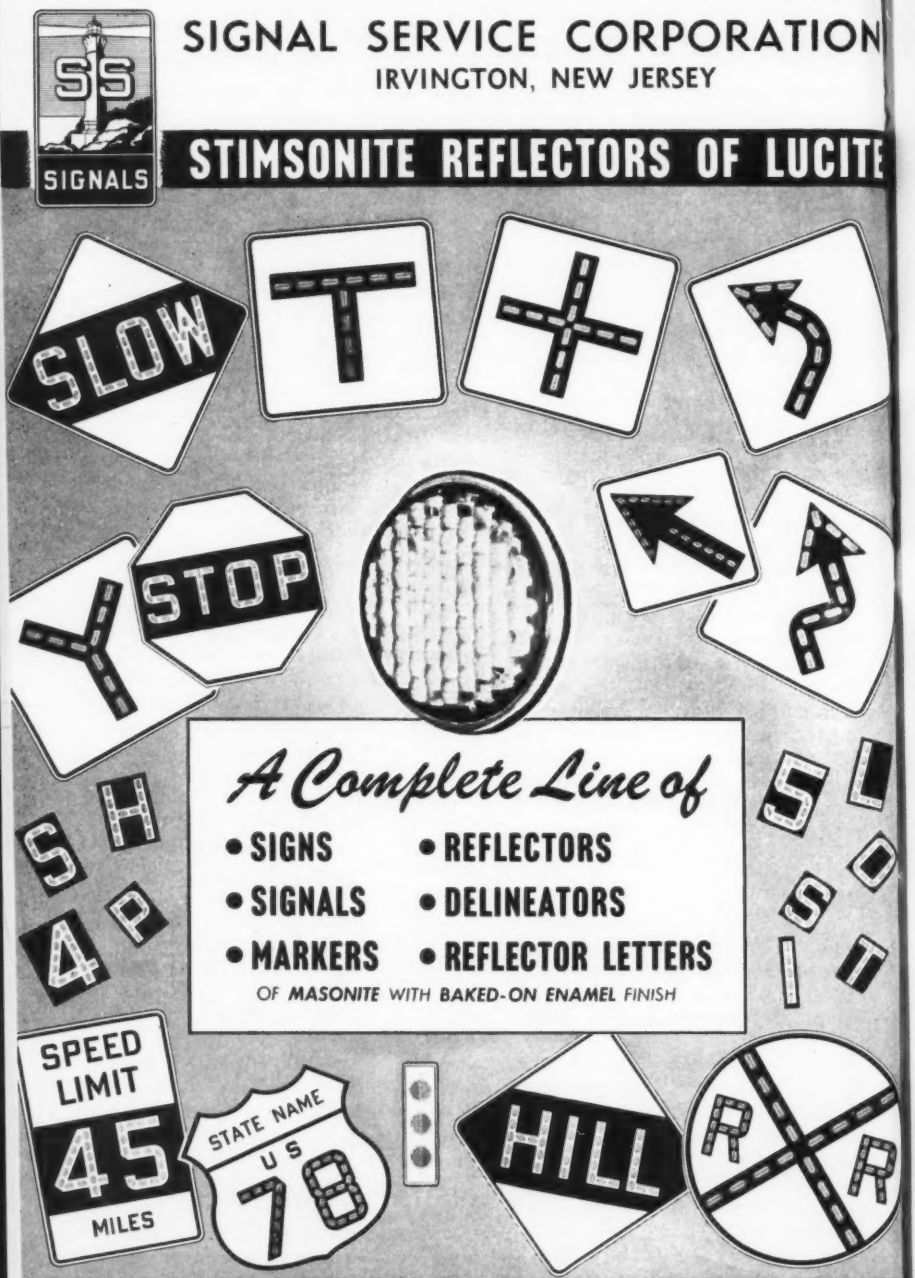
THEODORE W. FORBES (Affil.), formerly Defense Research Senior Investigator with the University of Pennsylvania, is now with the Psycho-Acoustic Laboratory of Harvard University.

HAROLD F. HAMMOND (Mem.) has been acting as Consultant to the City of Lansing, Michigan, on the problem of staggered hours and employee transportation. Mr. Hammond has completed a comprehensive report and recommendations which are now being put into effect. SIDNEY ANGER (Assoc.), Lansing City Traffic Engineer, has also been working with Mr. Hammond on this project.

HARRY KOCH (Mem.), Head Transportation Specialist, Army Transportation Corps, has recently completed a survey of the transportation requirements of the nation's vital war industries. Harry has spent considerable time in Washington securing information from governmental and national agencies and manufacturers, in order to develop the information which will be presented to the proper authorities to aid them in planning required action to ensure adequate transportation for these vital industries during 1944.

CAPT. GORDON GRAVELLE (Assoc.), formerly with the United States Army Corps of Engineers and on leave from the Michigan State Highway Department, has been transferred to the Army Transportation Corps and expects to be sent overseas soon. He is now stationed on the west coast, assigned to a traffic regulation group.

LIEUT. L. A. ANDRIACCHI (Assoc.), on leave from the Michigan State Highway Department, recently received his commission as Second Lieutenant, assigned to the Transportation Corps, and is now stationed at the New York Port of Embarkation.


SS
SIGNALS
SIGNAL SERVICE CORPORATION
IRVINGTON, NEW JERSEY
STIMSONITE REFLECTORS OF LUCITE
SLOW
STOP
A Complete Line of
• SIGNS • REFLECTORS
• SIGNALS • DELINEATORS
• MARKERS • REFLECTOR LETTERS
OF MASONITE WITH BAKED-ON ENAMEL FINISH
SPEED LIMIT
45
MILES
STATE NAME
U S
70
HILL
R R
SAFETY DEVICES FOR TRAFFIC

CAPT. JOHN BEAKY (Mem.), United States Army Transportation Corps, on leave from the Oregon State Highway Department, has left for overseas duty.

LIEUT. (J.G.) ROGER GILMAN (Jun.), on leave from the Port of New York Authority, is now aboard the battleship Arkansas. He will appreciate receiving letters, and should be addressed in care of the Postmaster, New York City.

NATHAN CHERNIACK (Mem.), Economist, Port of New York Authority, states that the Lincoln Tunnel is now carrying traffic at capacity load. About 20,000 vehicles a day cross the Hudson River through this tunnel. It is expected that the second tube will be opened next year which will double the capacity.

JOHN GIBALA (Mem.) reports that about 30 per cent of the masks have been removed from traffic signals in New York City. John says that this constitutes about 25,000 masks.

BERNARD HARTUNG (Assoc.) reports that, beginning January 1st, he will take over the assignment of field deputy, Salvage Division, WPB, covering the ten western states. Bernie says, "This means that I will be back in Washington, D. C., on the average of every two months . . . although I have been in the category of a 'glorified' junk man for the past two years, it has been my purpose to keep in close contact with traffic work . . . have been spending odd moments with the Highway Department in Carson City, working on new types of traffic paint."

LOOKING AHEAD

AMERICAN SOCIETY OF CIVIL ENGINEERS will hold its Ninety-First Annual Meeting in New York, January 19 to 21. Business and technical meetings will take place at Society headquarters, 33 West 39th Street. Of especial interest to traffic engineers will be the City Planning meeting, Wednesday afternoon, January 19; and the Highway Divisions meeting, Friday afternoon, January 21.

A SCHOOL FOR PLANNING AND ZONING OFFICIALS is scheduled for January 27, 28, and 29, to be held at Columbia University, New York City, under the direction of the MUNICIPAL TRAINING INSTITUTE OF NEW YORK STATE. Thursday morning, January 27, the theme will be How To Inventory Your Community. The afternoon will be devoted to Causes Of Urban Problems. Friday morning will feature Analysis Of Post-War Community Needs, while the afternoon subject will be How To Obtain The Desired Post-War Community. Saturday's program will consist of round table discussion of finances, procedures, techniques, etc., in problems of small and large communities. For further details, contact the Director of the School, Fred Fisch (Assoc.), Director, Schenectady Bureau of Traffic and Planning.

The next I.T.E. NEW YORK SECTION meeting has been tentatively set for Thursday night, January 20, at the Hotel Holley, Washington Square, New York City.

Material for TRAFFIC ENGINEERING should be in the Editor's hands by the 20th of the month preceding the magazine issue. The final copy goes to the printer on the first of the month of the issue.

News From Here and There

FREEWAY: Denver has joined the ranks of American cities served by entrance highways of freeway of limited-access design. Now being completed, this five-mile expressway cost one and one-half million dollars, and extends out 6th Avenue to the Denver Ordnance Plant located three miles beyond the city limits. It consists of two 32-foot main roadways, separated by a median strip and flanked by separation curbs and two-lane local service roads. Each main roadway is designed for two 12-foot traffic lanes and an 8-foot outer parking or emergency lane. The service roads are 22 feet wide. The paths of acceleration and deceleration lanes are designed for sixty miles an hour maximum. Barricades consisting of two or three creosoted wood posts and railing were provided at junctions with local side streets. At the principal intersection, Sheridan Boulevard, at the city line, the freeway was widened to four lanes in each direction, and channelizing islands were installed to guide turning traffic.

AUTOMOBILES: One automobile manufacturer is working on a post-war model in which the engine and the rear wheels are a single unit, fastened to the body by four bolts. This permits exchange of engine units about like a battery is changed nowadays. According to other designs, you will never need to bother about filling the radiator. Your motor will need no draining, cleaning, or other attention.

FACTS: In the first assault of the North African campaign, 110 tons of maps were required and 400 tons more were needed in the later phases of the campaign. A heavy bomber cruising at a speed of 250 miles per hour may use 200 gallons of gasoline in one hour. An army transport burns 33 thousand gallons of fuel oil a day. A modern destroyer uses more than 3,000 gallons of oil an hour at top speed. An army light tank may burn one gallon of gasoline a minute. A pursuit plane at a cruising speed of 200 miles an hour requires one gallon of gasoline for every four miles of flying. A mechanized division burns up 18,000 gallons of gasoline in one hour of combat.

POST-WAR: Tremendous programs of highway repair and reconstruction will be needed throughout the country in the near future in order to keep our wartime traffic moving, according to S. C. Hadden, Commissioner, Indiana State Highway Commission and Vice-President of the American Association of State Highway Officials. He urges that emphasis be placed on the needs for road improvement and construction rather than on the preparation of such programs merely to create employment for men returning from the Armed Service.

A Challenge

The Committee on Sale of Publications offers a challenge to the membership. In a 60 day drive to double the distribution of the TRAFFIC ENGINEERING Magazine, the Committee is asking each member to obtain a new subscription. George Fisher, chairman of the Committee, in asking for the cooperation of the membership, says, "TRAFFIC ENGINEERING is extremely important to the Institute's welfare—both present and future. Its contents are to be improved and enlarged. Articles of particular interest and use to War Transportation Committees, technical papers on traffic engineering problems, and papers on postwar planning are a few of the contents of issues to come. Come on, fellows, let's get that subscription and let one more person become acquainted with the ITE and the profession for which it stands."